

# News

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**Bureau of Labor Statistics**

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## PRODUCTIVITY AND COSTS: SERVICE-PRODUCING AND MINING INDUSTRIES, 1990-99

Labor productivity rose in 1999 in most of the U.S. service-producing and mining industries studied by the Bureau of Labor Statistics of the U.S. Department of Labor. Nearly half of the industries that registered productivity growth also posted declines in unit labor costs.

In 1999, labor productivity—defined as output per hour—increased in over 80 percent of the service-producing and mining industries covered in this release. Eighty-six percent of the industries recorded output growth, while hours of labor grew in 69 percent of the industries. The proportion of service-producing and mining industries experiencing productivity growth from 1990 to 1999 was larger than the proportion with productivity growth in 1999; over the 1990-99 period, output per hour advanced in 86 percent of the service-producing and mining industries. Output rose in 92 percent of the industries, while hours of labor grew in 57 percent of the industries.

The attached tables present data for the service-producing and mining industries for which BLS publishes productivity series. Although the analysis that follows will focus primarily on industries at the 3-digit level of the Standard Industrial Classification (SIC) Manual, BLS also publishes productivity series at the more detailed 4-digit level for many of these industries, as well as for many manufacturing industries. (Productivity in manufacturing industries for 1999 was reported in USDL 01-141, issued May 15, 2001. See technical note for more information). Included in this news release for the first time are productivity and related data for personal services and for a number of newly published 2-digit retail trade industries, as well as measures for the retail trade sector as a whole. An article discussing the new measures for retail trade industries will appear in a forthcoming issue of the *Monthly Labor Review*.

## **Retail trade**

### Recent trends

Productivity rose in 1999 in 26 of the 28 published 3-digit industries in retail trade. (See table 1.) The increases ranged from 1.4 percent in household appliance stores to 23.0 percent in retail bakeries. The largest industries in retail trade, those with more than 2,400,000 employees, are eating and drinking places, grocery stores, and department stores. In 1999, output per hour rose 2.3 percent in eating and drinking places, 3.4 percent in grocery stores, and 8.8 percent in department stores. The two retail trade industries registering productivity declines were paint, glass, and wallpaper stores (-0.1 percent) and liquor stores (-1.6 percent).

Of the 26 3-digit industries in retail trade that recorded productivity growth, 15 also experienced decreases in unit labor costs in 1999. (See table 2.) The decreases in unit labor costs ranged from -0.5 percent in shoe stores to -15.2 percent in variety stores. Despite productivity growth, unit labor costs rose in the two largest industries in retail trade—1.9 percent in eating and drinking places and 0.4 percent in grocery stores.

Reflecting the rates of growth among the individual retail trade industries, productivity in the retail trade sector as a whole rose 5.2 percent in 1999, with output growing 7.1 percent and hours increasing 1.8 percent. No change in unit labor costs was registered in the retail sector in 1999.

### Long-term trends

The number of retail trade industries with long-term productivity growth (1990-99) was equal to the number with short-term productivity growth. Although the long-term rates tended to be lower than the 1999 rates, labor productivity advanced at average annual rates exceeding 5.0 percent in eight 3-digit retail industries. An additional 13 industries registered annual growth rates in output per hour in the 2.0-5.0 percent range.

Over the 1990-99 period, unit labor costs declined in half of the 28 retail trade industries. The largest declines were in variety stores (-5.7 percent per year), radio, television, computer, and music stores (-5.6 percent per year), and miscellaneous general merchandise stores (-3.5 percent per year).

Productivity in the overall retail sector grew at a rate of 2.3 percent per year over the period, with output increasing by 3.7 percent per year and hours by 1.4 percent per year. Unit labor costs rose 1.4 percent per year for the retail sector as a whole.

In the early years of this period, 1990-95, output per hour increased in 22 of the 28 published 3-digit retail trade industries. (See table 3.) As the economic expansion continued, productivity growth rates among the retail trade industries accelerated. In the

1995-99 period, productivity rose in all 28 retail trade industries, with 22 of the industries exhibiting even higher productivity growth rates in the latter period than in the former.

The number of retail trade industries with declining unit labor costs changed little as the economic expansion continued. (See table 4.) The number of retail trade industries with falling unit labor costs rose from 13 in the 1990-95 period to 14 in the 1995-99 period.

Reflecting the pattern seen for individual industries, the retail sector as a whole exhibited stronger productivity gains in the latter part of the decade—output per hour grew 1.6 percent per year in the earlier period and 3.1 percent per year in the later period. Unit labor costs, however, rose in both periods—1.4 percent per year from 1990-95 and 1.3 percent per year from 1995-99.

## **Finance and services**

### Recent trends

In 1999, gains in output per hour were posted in six of the nine industries in finance and services for which BLS published data at the 3-digit level. The largest industry in terms of employment was hotels and motels, where productivity increased 1.7 percent. In the next largest industry, commercial banks, output per hour rose 2.0 percent.

The only declines in unit labor costs occurred in laundry, cleaning, and garment services (-0.5 percent) and motion picture theaters (-2.9 percent) in 1999. The largest industries in finance and services experienced rising unit labor costs. Unit labor costs advanced 3.8 percent in hotels and motels and 5.6 percent in commercial banks.

In the personal services industry (SIC 72), productivity increased at a rate of 1.6 percent, in 1999, while output grew 4.2 percent and hours increased 2.5 percent. Unit labor costs in personal services increased by 2.5 percent.

### Long-term trends

All but one of the nine industries in the finance and services sector registered long-term labor productivity growth. From 1990 to 1999, output per hour rose at an average annual rate of 1.8 percent in hotels and motels and 2.6 percent in commercial banks.

Unit labor costs rose in eight of the nine industries in finance and services over the period 1990-99. Only barber shops posted a long-term decline in unit labor costs. Unit labor costs decreased 0.9 percent per year in this industry.

Productivity in the personal services industry grew over the period at a rate of 1.2 percent per year, and unit labor costs rose at a rate of 2.5 percent per year.

Over the period 1990-95, productivity increased in eight of the nine published 3-digit industries in the finance and services sector. Productivity grew in seven of the industries in the period 1995-99, with four of the industries exhibiting higher productivity growth rates in the latter period.

Unit labor costs increased in both periods in most of the finance and services industries. Unit labor costs fell in two industries in 1990-95, and in one industry in 1995-99.

Productivity in the overall personal services industry increased at a higher rate in the later period, growing 1.7 percent per year, compared with a growth rate of 0.8 percent per year in the earlier period. Unit labor costs increased at a slightly higher rate in the later period, 2.6 percent per year, up from 2.4 percent per year in the period 1990-95.

### **Transportation, communications, and utilities**

#### Recent trends

Among the transportation industries, output per hour advanced 0.5 percent in the U. S. postal service, 1.3 percent in trucking, and 5.2 percent in railroads. The only measured transportation industry to register a productivity decline in 1999 was airlines (-2.2 percent). Productivity gains were recorded in two of the three communications industries, rising 11.1 percent in telephone communications and 1.1 percent in radio and television broadcasting. In contrast, productivity fell 2.4 percent in cable and other pay TV services. In the utilities sector, output per hour increased 1.6 percent in electric utilities and 0.5 percent in gas utilities.

In 1999, unit labor costs fell 2.9 percent in railroad transportation. All other industries in the transportation, communications, and utilities sectors recorded rising unit labor costs.

#### Long-term trends

Over the 1990-99 period, all but two of the industries in the transportation, communications, and utilities sectors posted gains in labor productivity. The largest gains were in telephone communications (5.9 percent per year); railroad transportation (4.9 percent per year); electric utilities (4.4 percent per year); and gas utilities (3.6 percent per year).

Unit labor costs rose over the long term in most of the industries in the transportation, communications, and utilities sectors: the railroad transportation and telephone communications industries were the exceptions.

All but one of the industries in the transportation, communications, and utilities sectors exhibited productivity growth between 1990 and 1995. In comparison, six of the nine industries registered productivity increases in the period 1995-99. Of these six industries, half had higher rates of productivity growth in the latter period.

Unit labor costs fell in four of the industries in this sector between 1990 and 1995. The three industries with the largest unit labor costs declines—railroad transportation, telephone communications, and gas utilities—also registered the highest productivity growth rates from 1990 to 1995. In the latter period, unit labor costs again dropped in railroad transportation and telephone communications and also dropped slightly in electric utilities. The productivity growth rates in these industries were the highest in this sector between 1995 and 1999.

## **Mining**

### Recent trends

Productivity increased in 1999 in three of the five 3-digit mining industries reported here. Declines in output per hour were recorded in crushed and broken stone (-4.8 percent) and copper ores (-10.8 percent).

Unit labor costs fell 0.2 percent in gold and silver ores and 2.0 percent in bituminous coal and lignite mining in 1999. Increases in unit labor costs occurred in crude petroleum and natural gas (2.7 percent), crushed and broken stone (8.4 percent), and copper ores (21.0 percent).

### Long-term trends

Over the 1990-99 period, all of the published 3-digit mining industries posted productivity gains. The largest increases were in gold and silver ores, 5.6 percent per year, and bituminous coal and lignite mining, 5.5 percent per year.

The two mining industries with the fastest growth in productivity were the only ones to reduce unit labor costs. From 1990 to 1999, unit labor costs fell 0.7 percent in gold and silver ores and 2.7 percent in bituminous coal and lignite mining.

From 1990 to 1995, productivity grew in all these 3-digit mining industries. From 1995 to 1999, however, productivity grew in just three of the mining industries, with only one industry, gold and silver ores, exhibiting a higher rate of growth in the later period.

Unit labor costs fell in one mining industry from 1990 to 1995 and in two industries between 1995 and 1999. The industries with decreasing unit labor costs were among those with the largest increases in productivity in both periods.

## Technical Note

### Revisions

The data in this news release reflect revisions to series as published in table 42 of the *Monthly Labor Review* and in the news release *Productivity and Costs: Service-Producing and Mining Industries, 1987-98* (May 26, 2000). Indexes of productivity by industry have been revised for the years 1978 to 1998 for most of the retail trade and services industries included in this news release. These revisions are due to the incorporation of the research series CPI (CPI -U-RS) and of revised annual sales data from the Census Bureau, which were benchmarked to preliminary Census of Retail Trade data. The revised series can be obtained in several ways: by visiting the Industry Productivity web site (<http://www.bls.gov/iphome.htm>); by calling the Division of Industry Productivity Studies (202-691-5618); or by sending a request by e-mail ([dipsweb@bls.gov](mailto:dipsweb@bls.gov)).

Industry output indexes are prepared from basic data published by various public and private agencies, using the greatest level of detail available. Data from the Bureau of the Census, U.S. Department of Commerce, are used extensively in developing output statistics for manufacturing, trade, and service-producing industries. Data from the 1999 Service Annual Survey (which includes transportation, communications, and personal and business services) were published primarily on the basis of the new North American Industry Classification System (NAICS); earlier surveys were published according to the Standard Industrial Classification (SIC) system. Implementation of NAICS by federal agencies will be in phases. In order to update the productivity series for this news release, BLS converted the NAICS-based data to a SIC basis. BLS will continue to publish the productivity series on a SIC basis until all the data underlying the productivity series have been converted to a NAICS basis.

All of the measures for 1999 in this news release are preliminary and subject to revision.

### Productivity measurement

The productivity measures in this release describe the relationship between output and the labor time involved in its production. They show the changes from period to period in the amount of goods and services produced per hour. Although these measures relate output to hours of employees or all persons engaged in an industry, they do not measure the specific contribution of labor, capital, or any other factor of production. Rather, they reflect the joint effects of many influences, including changes in technology; capital investment; level of output; utilization of capacity, energy, and materials; the organization of production; managerial skill; and the characteristics and effort of the workforce.

Year-to-year movements in productivity measures for some industries might be somewhat erratic, particularly in the smaller industries. The annual changes in an

industry's productivity are based on sample data, which are likely to differ from data generated by a census of establishments in the industry. As a result, long-term trends tend to be more reliable indicators of the performance of an industry than are the year-to-year changes.

#### Unit labor cost measurement

The unit labor cost series in this release describe the cost of labor input required to produce one unit of output. Unit labor costs are calculated as the ratio of current dollar labor compensation to constant dollar output. The indexes of unit labor costs for each industry are computed by dividing an index of current dollar compensation by an index of constant dollar output.

Compensation is a measure of the cost to the employer of securing the services of labor. It is defined as payroll plus supplemental payments. Payroll includes salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind. Supplemental payments are divided into legally required expenditures and payments for voluntary programs. The legally required expenditures include employers' contributions to Social Security, unemployment insurance taxes, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation, such as the employer portion of private health insurance and pension plans.

The indexes of industry output used in measuring labor productivity and unit labor costs are, wherever possible, calculated with a Tornqvist formula. This formula aggregates the growth rates of the various industry products between two periods using the products' shares in industry value of production, averaged over the two periods, as weights.

Published productivity and unit labor cost data for 2-, 3-, and 4-digit SIC industries in the goods-producing and service-producing sectors are available on the Internet at <http://www.bls.gov/iprhome.htm>. Productivity series for additional industries have been withheld from publication because they do not meet BLS publication standards. Unpublished data can be requested by phoning 202-691-5618 or by sending e-mail to [dipsweb@bls.gov](mailto:dipsweb@bls.gov).

Information in this release will be made available to sensory impaired individuals upon request. Voice phone: 202-691-5200; TDD message referral phone number: 1-800-877-8339.

**Table 1. Annual percent change in output per hour and related series: service-producing and mining industries, 1990-99 and 1998-99**

SIC code	Industry	1999 Employment <sup>1</sup> (thousands)	Annual percent change, 1990-99			Annual percent change, 1998-99		
			Output per hour <sup>2</sup>	Output	Employee hours <sup>3</sup>	Output per hour <sup>2</sup>	Output	Employee hours <sup>3</sup>
	Mining							
102	Copper ores	14	0.3	-0.1	-0.4	-10.8	-14.0	-3.5
104	Gold and silver ores	14	5.6	1.2	-4.2	6.6	-7.5	-13.2
12	Coal mining	85	5.5	-0.4	-5.6	2.4	-4.6	-6.9
122	Bituminous coal and lignite mining	80	5.5	-0.4	-5.6	2.2	-4.5	-6.6
13	Oil and gas extraction	293	2.7	-0.9	-3.5	12.8	-3.1	-14.1
131	Crude petroleum and natural gas	133	3.5	-0.9	-4.2	3.9	-3.1	-6.7
14	Nonmetallic minerals, except fuels	112	0.8	1.1	0.3	0.6	1.7	1.1
142	Crushed and broken stone	45	0.3	1.8	1.5	-4.8	-1.0	4.0
	Transportation							
4011	Railroad transportation	203	4.9	2.7	-2.1	5.2	3.7	-1.4
4213	Trucking, except local	901	1.9	3.9	1.9	1.3	4.0	2.6
43	United States Postal Service <sup>4</sup>	873	0.7	1.8	1.2	0.5	1.6	1.1
4512,13, 22(PTS)	Air transportation	711	1.7	4.2	2.4	-2.2	1.9	4.2
	Communications and Utilities							
481	Telephone communications	1070	5.9	7.9	2.0	11.1	15.0	3.5
483	Radio and television broadcasting	248	-0.3	0.6	1.0	1.1	1.6	0.5
484	Cable and other pay television services	201	-1.4	4.8	6.3	-2.4	10.4	13.0
491,3(PT)	Electric utilities	480	4.4	1.8	-2.5	1.6	-0.9	-2.5
492,3(PT)	Gas utilities	169	3.6	1.5	-2.0	0.5	1.1	0.7
	Retail Trade							
	Retail trade	24092	2.3	3.7	1.4	5.2	7.1	1.8
52	Building materials, hardware, garden supply, and mobile homes	1030	4.2	6.4	2.2	5.7	12.2	6.2
521	Lumber and other building materials dealers	625	3.5	7.2	3.6	6.1	14.9	8.3
523	Paint, glass, and wallpaper stores	71	4.8	3.8	-1.0	-0.1	7.0	7.1
525	Hardware stores	173	2.9	2.3	-0.6	8.4	8.7	0.3
526	Retail nurseries, lawn and garden supply stores	109	6.7	6.8	0.1	13.1	12.7	-0.4
53	General merchandise stores	2778	4.9	6.4	1.4	8.8	9.1	0.2
531	Department stores	2431	4.8	6.8	1.9	8.8	8.6	-0.2
533	Variety stores	141	8.4	5.7	-2.5	18.9	21.9	2.5
539	Miscellaneous general merchandise stores	207	5.7	4.8	-0.9	5.1	8.8	3.5
54	Food stores	3617	-0.3	0.3	0.6	3.9	2.2	-1.6
541	Grocery stores	3154	-0.1	0.3	0.5	3.4	2.2	-1.1
542	Meat and fish (seafood) markets	58	0.0	-0.4	-0.4	3.8	5.5	1.6
546	Retail bakeries	212	-0.9	1.0	2.0	23.0	8.4	-11.8
55	Automotive dealers and gasoline service stations	2449	2.0	2.8	0.7	5.2	5.7	0.5
551	New and used car dealers	1079	0.5	2.1	1.6	3.0	5.3	2.3
553	Auto and home supply stores	424	1.3	2.8	1.6	2.6	5.2	2.5
554	Gasoline service stations	681	3.5	2.4	-1.1	5.0	1.5	-3.4

See footnotes at end of table.



**Table 1. Annual percent change in output per hour and related series: service-producing and mining industries, 1990-99 and 1998-99**  
**Continued**

SIC code	Industry	1999 Employment <sup>1</sup> (thousands)	Annual percent change, 1990-99			Annual percent change, 1998-99		
			Output per hour <sup>2</sup>	Output	Employee hours <sup>3</sup>	Output per hour <sup>2</sup>	Output	Employee hours <sup>3</sup>
	<b>Retail Trade--Continued</b>							
56	Apparel and accessory stores	1233	5.3	4.7	-0.6	6.5	8.4	1.8
561	Men's and boys' wear stores	85	3.3	0.7	-2.5	6.5	5.1	-1.2
562	Women's clothing stores	293	6.7	2.0	-4.4	8.2	8.8	0.6
565	Family clothing stores	433	4.2	8.0	3.6	2.3	10.3	7.9
566	Shoe stores	215	3.8	2.3	-1.5	4.2	2.8	-1.3
57	Furniture, home furnishings, and equipment stores	1197	6.7	9.1	2.2	11.8	14.9	2.8
571	Furniture and homefurnishings stores	626	2.8	4.1	1.3	5.4	7.6	2.1
572	Household appliance stores	81	6.5	4.1	-2.3	1.4	9.0	7.5
573	Radio, television, computer, and music stores	491	11.2	16.3	4.6	20.8	24.3	2.9
58	Eating and drinking places <sup>5</sup>	8174	0.0	2.2	2.2	2.3	4.5	2.1
59	Miscellaneous merchandise stores	3613	3.3	4.9	1.5	0.5	5.4	4.8
591	Drug and proprietary stores	672	2.2	3.2	1.0	3.3	7.2	3.7
592	Liquor stores	144	0.9	0.2	-0.7	-1.6	6.0	7.8
593	Used merchandise stores	208	6.5	11.3	4.5	11.2	26.2	13.5
594	Miscellaneous shopping goods stores	1203	3.4	5.0	1.5	4.6	8.2	3.4
596	Nonstore retailers	593	8.0	10.7	2.5	6.8	16.4	9.0
598	Fuel dealers	100	3.5	1.9	-1.6	8.8	10.2	1.3
599	Retail stores, n.e.c.	693	3.9	5.6	1.7	2.3	5.0	2.6
	<b>Finance and Services</b>							
602	Commercial banks	1476	2.6	1.9	-0.7	2.0	2.3	0.3
701	Hotels and motels	1809	1.8	3.1	1.2	1.7	3.6	1.9
72	Personal services	1815	1.2	2.1	0.9	1.6	4.2	2.5
721	Laundry, cleaning, and garment services	525	2.0	2.0	0.1	4.9	4.3	-0.5
722	Photographic studios, portrait	90	0.8	3.4	2.7	-13.6	1.1	17.0
723	Beauty shops	731	1.7	2.6	0.9	2.5	2.5	0.0
724	Barber shops	57	3.6	0.8	-2.7	-12.4	7.1	22.3
726	Funeral services and crematories	107	1.0	0.9	-0.1	-4.3	-1.8	2.7
753	Automotive repair shops	900	1.9	3.1	1.2	2.2	2.2	0.0
783	Motion picture theaters	138	-0.7	1.5	2.3	4.1	5.6	1.4

<sup>1</sup> Employment figures are based primarily on data from the BLS Current Employment Statistics (CES) program and the Current Population Survey (CPS). Other sources are: the Association of American Railroads, the Department of Transportation, and the U.S. Postal Service.

<sup>2</sup> Output per employee hour is measured in mining, transportation, communications, and SICs 531, 551, 602, and 783. Output per hour of all persons is used for all other trade and services industries. All persons include self-employed and unpaid family workers as well as employees. In SIC 4213 and 4512,13,22(pts), output per employee hour is based on output per employee with the assumption of constant average weekly hours.

<sup>3</sup> Employee hours are measured in mining, transportation, communications, and SICs 531, 551, 602, and 783. Hours of all persons are used for all other trade and services industries. All persons includes self-employed and unpaid family workers as well as employees. In SIC 4213 and 4512,13,22(pts), employee hours are based on employees with the assumption of constant average weekly hours.

<sup>4</sup> The United States Postal Service, SIC 43, is also designated in the Standard Industrial Classification Manual and is identical to the three-digit SIC Group Number, SIC 431, and the four-digit SIC Industry Number, SIC 4311. Employee hours in SIC 43 are based on the number of full-time equivalent (FTE) employee years, as reported in the U.S. Postal Service budget. FTE employee years are computed by dividing total hours of full-time, part-time, and intermittent workers by the number of hours in a standard work year. The output and hours for SIC 43 reflect the Federal fiscal year.

<sup>5</sup> Eating and drinking places, SIC 58, is also designated in the Standard Industrial Classification Manual and is identical to the three-digit SIC Group Number, SIC 581.

**Table 2. Annual percent change in total compensation, output, and unit labor costs: service-producing and mining industries, 1990-99 and 1998-99**

SIC code	Industry	1999 Employment <sup>1</sup> (thousands)	Annual percent change, 1990-99			Annual percent change, 1998-99		
			Total compensation	Output	Unit labor costs	Total compensation	Output	Unit labor costs
	Mining							
102	Copper ores	14	3.7	-0.1	3.7	4.1	-14.0	21.0
104	Gold and silver ores	14	0.4	1.2	-0.7	-7.7	-7.5	-0.2
12	Coal mining	85	-3.2	-0.4	-2.8	-6.6	-4.6	-2.1
122	Bituminous coal and lignite mining	80	-3.2	-0.4	-2.7	-6.4	-4.5	-2.0
13	Oil and gas extraction	293	1.9	-0.9	2.8	-6.0	-3.1	-3.0
131	Crude petroleum and natural gas	133	1.1	-0.9	2.0	-0.5	-3.1	2.7
14	Nonmetallic minerals, except fuels	112	3.7	1.1	2.5	3.8	1.7	2.0
142	Crushed and broken stone	45	4.7	1.8	2.9	7.3	-1.0	8.4
	Transportation							
4011	Railroad transportation	203	0.8	2.7	-1.9	0.7	3.7	-2.9
4213	Trucking, except local	901	5.1	3.9	1.2	6.0	4.0	1.9
43	United States Postal Service <sup>2</sup>	873	4.0	1.8	2.2	3.8	1.6	2.2
4512,13, 22(PTS)	Air transportation	711	4.8	4.2	0.6	7.0	1.9	5.0
	Communications and Utilities							
481	Telephone communications	1070	7.1	7.9	-0.8	16.6	15.0	1.4
483	Radio and television broadcasting	248	5.1	0.6	4.4	4.5	1.6	2.9
484	Cable and other pay television services	201	12.4	4.8	7.3	22.0	10.4	10.5
491,3(PT)	Electric utilities	480	1.9	1.8	0.1	1.8	-0.9	2.8
492,3(PT)	Gas utilities	169	2.5	1.5	1.0	5.3	1.1	4.1
	Retail Trade							
	Retail trade	24092	5.1	3.7	1.4	7.1	7.1	0.0
52	Building materials, hardware, garden supply, and mobile homes	1030	6.1	6.4	-0.3	9.8	12.2	-2.2
521	Lumber and other building materials dealers	625	7.3	7.2	0.1	12.1	14.9	-2.4
523	Paint, glass, and wallpaper stores	71	2.6	3.8	-1.2	7.8	7.0	0.8
525	Hardware stores	173	3.0	2.3	0.8	5.5	8.7	-2.9
526	Retail nurseries, lawn and garden supply stores	109	3.8	6.8	-2.8	3.6	12.7	-8.0
53	General merchandise stores	2778	4.5	6.4	-1.8	5.6	9.1	-3.2
531	Department stores	2431	5.1	6.8	-1.6	6.3	8.6	-2.1
533	Variety stores	141	-0.3	5.7	-5.7	3.3	21.9	-15.2
539	Miscellaneous general merchandise stores	207	1.1	4.8	-3.5	-2.3	8.8	-10.2
54	Food stores	3617	3.6	0.3	3.3	2.2	2.2	-0.1
541	Grocery stores	3154	3.4	0.3	3.1	2.6	2.2	0.4
542	Meat and fish (seafood) markets	58	1.6	-0.4	1.9	5.7	5.5	0.2
546	Retail bakeries	212	5.7	1.0	4.7	-6.1	8.4	-13.4
55	Automotive dealers and gasoline service stations	2449	5.4	2.8	2.5	7.4	5.7	1.6
551	New and used car dealers	1079	6.3	2.1	4.1	9.4	5.3	3.9
553	Auto and home supply stores	424	4.7	2.8	1.8	6.9	5.2	1.6
554	Gasoline service stations	681	2.4	2.4	0.1	0.7	1.5	-0.7

See footnote at end of table.

**Table 2. Annual percent change in total compensation, output, and unit labor costs: service-producing and mining industries, 1990-99 and 1998-99--Continued**

SIC code	Industry	1999 Employment <sup>1</sup> (thousands)	Annual percent change, 1990-99			Annual percent change, 1998-99		
			Total compensation	Output	Unit labor costs	Total compensation	Output	Unit labor costs
	<b>Retail Trade--Continued</b>							
56	Apparel and accessory stores	1233	3.4	4.7	-1.3	5.3	8.4	-2.9
561	Men's and boys' wear stores	85	0.5	0.7	-0.2	2.3	5.1	-2.7
562	Women's clothing stores	293	-0.3	2.0	-2.3	5.0	8.8	-3.5
565	Family clothing stores	433	7.7	8.0	-0.3	12.9	10.3	2.3
566	Shoe stores	215	2.5	2.3	0.3	2.3	2.8	-0.5
57	Furniture, home furnishings, and equipment stores	1197	6.6	9.1	-2.3	10.4	14.9	-3.9
571	Furniture and homefurnishings stores	626	5.2	4.1	1.0	7.0	7.6	-0.6
572	Household appliance stores	81	0.5	4.1	-3.4	15.9	9.0	6.3
573	Radio, television, computer, and music stores	491	9.7	16.3	-5.6	13.5	24.3	-8.7
58	Eating and drinking places <sup>3</sup>	8174	5.8	2.2	3.6	6.5	4.5	1.9
59	Miscellaneous merchandise stores	3613	5.7	4.9	0.7	11.5	5.4	5.8
591	Drug and proprietary stores	672	5.3	3.2	2.0	9.6	7.2	2.3
592	Liquor stores	144	3.2	0.2	3.0	13.9	6.0	7.4
593	Used merchandise stores	208	7.9	11.3	-3.1	14.5	26.2	-9.3
594	Miscellaneous shopping goods stores	1203	5.2	5.0	0.3	8.7	8.2	0.5
596	Nonstore retailers	593	8.5	10.7	-2.0	23.1	16.4	5.8
598	Fuel dealers	100	1.6	1.9	-0.2	4.0	10.2	-5.6
599	Retail stores, n.e.c.	693	5.1	5.6	-0.4	7.4	5.0	2.2
	<b>Finance and Services</b>							
602	Commercial banks	1476	5.7	1.9	3.8	8.0	2.3	5.6
701	Hotels and motels	1809	5.7	3.1	2.5	7.5	3.6	3.8
72	Personal services	1815	4.7	2.1	2.5	6.8	4.2	2.5
721	Laundry, cleaning, and garment services	525	3.5	2.0	1.5	3.8	4.3	-0.5
722	Photographic studios, portrait	90	4.3	3.4	0.9	4.3	1.1	3.2
723	Beauty shops	731	5.2	2.6	2.5	5.9	2.5	3.3
724	Barber shops	57	-0.1	0.8	-0.9	35.6	7.1	26.5
726	Funeral services and crematories	107	4.1	0.9	3.2	5.1	-1.8	7.0
753	Automotive repair shops	900	4.8	3.1	1.6	4.6	2.2	2.4
783	Motion picture theaters	138	4.7	1.5	3.1	2.6	5.6	-2.9

<sup>1</sup> Employment figures are based primarily on data from the BLS Current Employment Statistics (CES) program and the Current Population Survey (CPS). Other sources are: the Association of American Railroads, the Department of Transportation, and the U.S. Postal Service.

<sup>2</sup> The United States Postal Service, SIC 43, is also designated in the Standard Industrial Classification Manual and is identical to the three-digit SIC Group Number, SIC 431, and the four-digit SIC Industry Number, SIC 4311.

<sup>3</sup> Eating and drinking places, SIC 58, is also designated in the Standard Industrial Classification Manual and is identical to the three-digit SIC Group Number, SIC 581.

**Table 3. Annual percent change in output per hour and related series: service-producing and mining industries, 1990-95 and 1995-99**

SIC code	Industry	1999 Employment <sup>1</sup> (thousands)	Annual percent change, 1990-95			Annual percent change, 1995-99		
			Output per hour <sup>2</sup>	Output	Employee hours <sup>3</sup>	Output per hour <sup>2</sup>	Output	Employee hours <sup>3</sup>
	Mining							
102	Copper ores	14	2.7	2.9	0.2	-2.6	-3.6	-1.0
104	Gold and silver ores	14	3.3	1.0	-2.3	8.5	1.5	-6.5
12	Coal mining	85	5.6	-0.9	-6.2	5.5	0.2	-5.0
122	Bituminous coal and lignite mining	80	5.6	-1.0	-6.2	5.4	0.2	-4.9
13	Oil and gas extraction	293	3.4	-0.7	-4.0	1.8	-1.1	-2.8
131	Crude petroleum and natural gas	133	4.3	-0.7	-4.8	2.6	-1.1	-3.6
14	Nonmetallic minerals, except fuels	112	0.6	0.1	-0.5	1.1	2.4	1.3
142	Crushed and broken stone	45	0.6	0.8	0.2	-0.1	3.0	3.1
	Transportation							
4011	Railroad transportation	203	5.7	3.3	-2.3	3.9	1.9	-2.0
4213	Trucking, except local	901	2.5	4.3	1.8	1.2	3.4	2.1
43	United States Postal Service <sup>4</sup>	873	0.5	1.4	1.0	0.9	2.3	1.4
4512,13, 22(PTS)	Air transportation	711	3.2	3.9	0.7	-0.1	4.5	4.6
	Communications and Utilities							
481	Telephone communications	1070	5.5	5.5	-0.1	6.3	11.1	4.5
483	Radio and television broadcasting	248	0.9	1.1	0.2	-1.8	0.0	1.9
484	Cable and other pay television services	201	-1.8	3.0	4.9	-0.9	7.0	8.0
491,3(PT)	Electric utilities	480	4.2	2.3	-1.8	4.8	1.3	-3.3
492,3(PT)	Gas utilities	169	5.3	2.9	-2.3	1.4	-0.2	-1.6
	Retail Trade							
	Retail trade	24092	1.6	2.8	1.2	3.1	4.9	1.7
52	Building materials, hardware, garden supply, and mobile homes	1030	3.3	5.0	1.6	5.3	8.3	2.8
521	Lumber and other building materials dealers	625	2.5	5.4	2.9	4.8	9.5	4.5
523	Paint, glass, and wallpaper stores	71	4.2	2.3	-1.8	5.7	5.7	0.0
525	Hardware stores	173	0.0	1.0	1.0	6.6	3.9	-2.6
526	Retail nurseries, lawn and garden supply stores	109	6.7	5.3	-1.3	6.5	8.7	2.1
53	General merchandise stores	2778	4.1	6.2	2.0	5.9	6.6	0.7
531	Department stores	2431	3.7	6.5	2.8	6.2	7.1	0.9
533	Variety stores	141	6.5	2.5	-3.7	10.9	9.9	-0.9
539	Miscellaneous general merchandise stores	207	7.1	5.4	-1.6	3.9	4.0	0.1
54	Food stores	3617	-0.8	-0.2	0.6	0.3	0.9	0.7
541	Grocery stores	3154	-0.6	-0.2	0.4	0.4	0.9	0.5
542	Meat and fish (seafood) markets	58	-0.9	-2.5	-1.6	1.3	2.4	1.1
546	Retail bakeries	212	-1.9	0.1	2.0	0.2	2.1	1.9
55	Automotive dealers and gasoline service stations	2449	1.8	2.0	0.1	2.3	3.7	1.4
551	New and used car dealers	1079	0.3	1.6	1.3	0.9	2.8	1.9
553	Auto and home supply stores	424	1.0	1.8	0.7	1.6	4.2	2.6
554	Gasoline service stations	681	4.3	2.3	-1.9	2.5	2.4	-0.1

See footnotes at end of table.

**Table 3. Annual percent change in output per hour and related series: service-producing and mining industries, 1990-95 and 1995-99**  
Continued

SIC code	Industry	1999 Employment <sup>1</sup> (thousands)	Annual percent change, 1990-95			Annual percent change, 1995-99		
			Output per hour <sup>2</sup>	Output	Employee hours <sup>3</sup>	Output per hour <sup>2</sup>	Output	Employee hours <sup>3</sup>
	<b>Retail Trade--Continued</b>							
56	Apparel and accessory stores	1233	5.4	3.5	-1.8	5.2	6.2	0.9
561	Men's and boys' wear stores	85	1.0	-2.3	-3.2	6.2	4.5	-1.7
562	Women's clothing stores	293	5.6	0.7	-4.6	8.0	3.7	-4.0
565	Family clothing stores	433	5.6	7.5	1.8	2.5	8.6	6.0
566	Shoe stores	215	5.2	1.3	-3.7	2.1	3.5	1.4
57	Furniture, home furnishings, and equipment stores	1197	6.0	7.7	1.6	7.6	10.7	2.9
571	Furniture and homefurnishings stores	626	2.3	2.8	0.4	3.4	5.9	2.4
572	Household appliance stores	81	5.8	3.0	-2.6	7.4	5.4	-1.9
573	Radio, television, computer, and music stores	491	10.5	15.6	4.6	12.1	17.1	4.5
58	Eating and drinking places <sup>5</sup>	8174	-0.5	1.5	2.0	0.6	2.9	2.4
59	Miscellaneous merchandise stores	3613	1.7	2.8	1.0	5.3	7.5	2.1
591	Drug and proprietary stores	672	0.9	0.8	-0.1	4.0	6.4	2.3
592	Liquor stores	144	-0.2	-2.6	-2.3	2.3	3.7	1.4
593	Used merchandise stores	208	3.2	7.7	4.4	10.8	16.0	4.7
594	Miscellaneous shopping goods stores	1203	2.8	3.8	1.0	4.2	6.4	2.1
596	Nonstore retailers	593	6.5	9.2	2.5	9.9	12.7	2.5
598	Fuel dealers	100	5.7	3.7	-1.9	0.8	-0.3	-1.1
599	Retail stores, n.e.c.	693	2.1	3.8	1.6	6.1	7.9	1.7
	<b>Finance and Services</b>							
602	Commercial banks	1476	3.2	1.9	-1.3	1.7	1.9	0.2
701	Hotels and motels	1809	2.8	3.1	0.3	0.7	3.1	2.4
72	Personal services	1815	0.8	1.4	0.7	1.7	3.0	1.3
721	Laundry, cleaning, and garment services	525	0.8	0.8	0.0	3.4	3.5	0.1
722	Photographic studios, portrait	90	3.4	5.5	2.0	-2.5	0.9	3.4
723	Beauty shops	731	1.4	2.6	1.2	2.0	2.5	0.5
724	Barber shops	57	2.8	-0.7	-3.4	4.5	2.7	-1.7
726	Funeral services and crematories	107	1.9	1.4	-0.5	-0.1	0.2	0.3
753	Automotive repair shops	900	2.4	3.0	0.6	1.2	3.3	2.1
783	Motion picture theaters	138	-2.3	-1.4	1.0	1.3	5.3	3.9

<sup>1</sup> Employment figures are based primarily on data from the BLS Current Employment Statistics (CES) program and the Current Population Survey (CPS). Other sources are: the Association of American Railroads, the Department of Transportation, and the U.S. Postal Service.

<sup>2</sup> Output per employee hour is measured in mining, transportation, communications, and SICs 531, 551, 602, and 783. Output per hour of all persons is used for all other trade and services industries. All persons include self-employed and unpaid family workers as well as employees. In SIC 4213 and 4512,13,22(pts), output per employee hour is based on output per employee with the assumption of constant average weekly hours.

<sup>3</sup> Employee hours are measured in mining, transportation, communications, and SICs 531, 551, 602, and 783. Hours of all persons are used for all other trade and services industries. All persons includes self-employed and unpaid family workers as well as employees. In SIC 4213 and 4512,13,22(pts), employee hours are based on employees with the assumption of constant average weekly hours.

<sup>4</sup> The United States Postal Service, SIC 43, is also designated in the Standard Industrial Classification Manual and is identical to the three-digit SIC Group Number, SIC 431, and the four-digit SIC Industry Number, SIC 4311. Employee hours in SIC 43 are based on the number of full-time equivalent (FTE) employee years, as reported in the U.S. Postal Service budget. FTE employee years are computed by dividing total hours of full-time, part-time, and intermittent workers by the number of hours in a standard work year. The output and hours for SIC 43 reflect the Federal fiscal year.

<sup>5</sup> Eating and drinking places, SIC 58, is also designated in the Standard Industrial Classification Manual and is identical to the three-digit SIC Group Number, SIC 581.

**Table 4. Annual percent change in total compensation, output, and unit labor costs: service-producing and mining industries, 1990-95 and 1995-99**

SIC code	Industry	1999 Employment <sup>1</sup> (thousands)	Annual percent change, 1990-95			Annual percent change, 1995-99		
			Total compensation	Output	Unit labor costs	Total compensation	Output	Unit labor costs
	Mining							
102	Copper ores	14	5.9	2.9	2.9	1.0	-3.6	4.7
104	Gold and silver ores	14	1.4	1.0	0.5	-0.8	1.5	-2.2
12	Coal mining	85	-3.8	-0.9	-2.9	-2.4	0.2	-2.6
122	Bituminous coal and lignite mining	80	-3.9	-1.0	-2.9	-2.3	0.2	-2.5
13	Oil and gas extraction	293	0.5	-0.7	1.2	3.7	-1.1	4.8
131	Crude petroleum and natural gas	133	-0.2	-0.7	0.6	2.6	-1.1	3.7
14	Nonmetallic minerals, except fuels	112	2.5	0.1	2.3	5.2	2.4	2.8
142	Crushed and broken stone	45	3.0	0.8	2.2	6.9	3.0	3.8
	Transportation							
4011	Railroad transportation	203	0.2	3.3	-3.0	1.5	1.9	-0.4
4213	Trucking, except local	901	4.6	4.3	0.3	5.7	3.4	2.3
43	United States Postal Service <sup>2</sup>	873	4.8	1.4	3.3	3.1	2.3	0.8
4512,13, 22(PTS)	Air transportation	711	3.8	3.9	-0.1	6.1	4.5	1.5
	Communications and Utilities							
481	Telephone communications	1070	4.2	5.5	-1.2	10.8	11.1	-0.3
483	Radio and television broadcasting	248	3.8	1.1	2.6	6.8	0.0	6.7
484	Cable and other pay television services	201	10.7	3.0	7.5	14.7	7.0	7.1
491,3(PT)	Electric utilities	480	2.6	2.3	0.3	1.2	1.3	-0.1
492,3(PT)	Gas utilities	169	2.2	2.9	-0.7	2.8	-0.2	3.1
	Retail Trade							
	Retail trade	24092	4.3	2.8	1.4	6.2	4.9	1.3
52	Building materials, hardware, garden supply, and mobile homes	1030	4.9	5.0	-0.1	7.7	8.3	-0.5
521	Lumber and other building materials dealers	625	5.8	5.4	0.4	9.2	9.5	-0.3
523	Paint, glass, and wallpaper stores	71	1.3	2.3	-1.0	4.3	5.7	-1.3
525	Hardware stores	173	3.5	1.0	2.5	2.5	3.9	-1.4
526	Retail nurseries, lawn and garden supply stores	109	1.8	5.3	-3.3	6.4	8.7	-2.2
53	General merchandise stores	2778	4.2	6.2	-1.9	4.9	6.6	-1.6
531	Department stores	2431	4.8	6.5	-1.6	5.4	7.1	-1.6
533	Variety stores	141	-1.2	2.5	-3.6	0.8	9.9	-8.3
539	Miscellaneous general merchandise stores	207	1.2	5.4	-4.0	1.0	4.0	-2.9
54	Food stores	3617	3.3	-0.2	3.6	3.9	0.9	3.0
541	Grocery stores	3154	3.1	-0.2	3.3	3.8	0.9	2.9
542	Meat and fish (seafood) markets	58	0.5	-2.5	3.2	2.9	2.4	0.4
546	Retail bakeries	212	5.6	0.1	5.5	5.9	2.1	3.6
55	Automotive dealers and gasoline service stations	2449	4.8	2.0	2.7	6.1	3.7	2.2
551	New and used car dealers	1079	6.0	1.6	4.4	6.6	2.8	3.7
553	Auto and home supply stores	424	3.7	1.8	1.9	6.0	4.2	1.7
554	Gasoline service stations	681	1.7	2.3	-0.6	3.3	2.4	0.9

See footnote at end of table.

**Table 4. Annual percent change in total compensation, output, and unit labor costs: service-producing and mining industries, 1990-95 and 1995-99--Continued**

SIC code	Industry	1999 Employment <sup>1</sup> (thousands)	Annual percent change, 1990-95			Annual percent change, 1995-99		
			Total compensation	Output	Unit labor costs	Total compensation	Output	Unit labor costs
	<b>Retail Trade--Continued</b>							
56	Apparel and accessory stores	1233	1.8	3.5	-1.7	5.4	6.2	-0.8
561	Men's and boys' wear stores	85	-1.3	-2.3	1.0	2.8	4.5	-1.6
562	Women's clothing stores	293	-1.5	0.7	-2.2	1.2	3.7	-2.4
565	Family clothing stores	433	5.6	7.5	-1.8	10.3	8.6	1.5
566	Shoe stores	215	1.1	1.3	-0.2	4.4	3.5	0.8
57	Furniture, home furnishings, and equipment stores	1197	4.5	7.7	-3.0	9.2	10.7	-1.4
571	Furniture and homefurnishings stores	626	3.5	2.8	0.7	7.4	5.9	1.5
572	Household appliance stores	81	-1.3	3.0	-4.2	2.8	5.4	-2.4
573	Radio, television, computer, and music stores	491	7.5	15.6	-7.0	12.6	17.1	-3.9
58	Eating and drinking places <sup>3</sup>	8174	5.0	1.5	3.4	6.9	2.9	3.8
59	Miscellaneous merchandise stores	3613	4.4	2.8	1.5	7.3	7.5	-0.2
591	Drug and proprietary stores	672	4.1	0.8	3.2	6.8	6.4	0.4
592	Liquor stores	144	1.4	-2.6	4.0	5.5	3.7	1.7
593	Used merchandise stores	208	7.7	7.7	0.0	8.2	16.0	-6.8
594	Miscellaneous shopping goods stores	1203	4.0	3.8	0.2	6.8	6.4	0.3
596	Nonstore retailers	593	6.8	9.2	-2.1	10.6	12.7	-1.9
598	Fuel dealers	100	0.5	3.7	-3.0	3.0	-0.3	3.3
599	Retail stores, n.e.c.	693	4.1	3.8	0.3	6.5	7.9	-1.3
	<b>Finance and Services</b>							
602	Commercial banks	1476	4.2	1.9	2.3	7.7	1.9	5.8
701	Hotels and motels	1809	4.3	3.1	1.1	7.4	3.1	4.2
72	Personal services	1815	3.9	1.4	2.4	5.6	3.0	2.6
721	Laundry, cleaning, and garment services	525	2.9	0.8	2.1	4.3	3.5	0.7
722	Photographic studios, portrait	90	4.8	5.5	-0.7	3.8	0.9	2.9
723	Beauty shops	731	5.1	2.6	2.4	5.4	2.5	2.8
724	Barber shops	57	-1.6	-0.7	-0.9	1.9	2.7	-0.9
726	Funeral services and crematories	107	4.3	1.4	2.9	3.8	0.2	3.6
753	Automotive repair shops	900	3.5	3.0	0.5	6.4	3.3	3.0
783	Motion picture theaters	138	2.2	-1.4	3.7	7.8	5.3	2.4

<sup>1</sup> Employment figures are based primarily on data from the BLS Current Employment Statistics (CES) program and the Current Population Survey (CPS). Other sources are: the Association of American Railroads, the Department of Transportation, and the U.S. Postal Service.

<sup>2</sup> The United States Postal Service, SIC 43, is also designated in the Standard Industrial Classification Manual and is identical to the three-digit SIC Group Number, SIC 431, and the four-digit SIC Industry Number, SIC 4311.

<sup>3</sup> Eating and drinking places, SIC 58, is also designated in the Standard Industrial Classification Manual and is identical to the three-digit SIC Group Number, SIC 581.